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10/003,753	10/22/2001	Mark Lucovsky	13768.198.3	4883

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EXAMINER
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ART UNIT	PAPER NUMBER
2164	

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/003,753	LUCOVSKY ET AL.
	Examiner	Art Unit	
	Jacob F. Betit	2164	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _17 September 2004_.

2a) ☒ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-44 and 46-50_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-44 and 46-50_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

SAM RIMELL
PRIMARY EXAMINER

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Remarks

1.   In response to communications filed on 17-September-2004, claims 1, 4, 36, 38, 43, and

46 are amended, and claim 45 is canceled per Applicants' request. Claims 1-44 and 46-50 are

presently pending in the application.

Specification

2.   The arrangement of the disclosed application does not conform with 37 CFR 1.77(b).

Section headings are underlined and boldfaced throughout the disclosed specification. Section

headings should not be underlined and/or **boldfaced**. Appropriate corrections are required.

3.   In the Remarks section of the Amendment dated 17-September-2004, the Applicants

stated they corrected problems with the specification noted in the previous office action, by

submitting both a substitute Specification along with a marked-up version (see page 16, 3rd

paragraph of the amendment). It appears that neither the substitute Specification nor the marked-

up version were included as part of the amendment.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

5.   Claims 1-5, 12-16, 36-44, and 46-47 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Ellis et al. (U.S. patent No. 6,195,662 B1) in view of Van Huben et al. (U.S.

patent No 6,654,747 B1).

As to claim 1, Ellis et al. teaches in a computer system that manages two or more

different types of data structures, each type of data structure being organized in accordance with

a set of rules and corresponding to an identity, a method for directly operating on data structures

in a generic manner regardless of the type of data structure being operated upon and without

requiring dedicated executable code for manipulating data structures of the particular data type,

the method comprising:

an act of recognizing a common set of command methods that operate on data structures

of a number of different data types corresponding to a plurality to a plurality of identities (see

column 6, lines 1-37);

an act of accessing a request to execute a command method on at least a portion of a data

structure of a particular data type corresponding to one or more applications and to a particular

identity, the command method being one of the common set of command methods (see column

7, lines 19-22);

an act of accessing the set of rules associated with the particular data type, the set of rules

defining how data structures of the particular data type are organized, and what portions of data

structure of the particular data type are allowed to have what commands executed thereon (see

column 4, line 66 through column 5, line 27);

an act of finding the portion of the data structure that is to be operated upon by

interpreting the request in light of the set of rules (see column 6, line 66 through column 7, line

12);

an act of determining that the command method is allowed to be implemented on the

portion of the data structure by consulting the set of rules (see column 6, lines 13-25, where if the

data bags are not the same type the command method cannot be implemented); and

an act of executing the command method on the found portion of the data structure (see

column 7, lines 13-22).

Ellis et al. does not teach

(a) a number of different data types corresponding to a plurality of applications and to a

plurality of identities that control access to the data structures; and

(b) the request to execute the command method identifying the data structure by

identifying (i) the particular identity, (ii) a set of rules associated with the particular data type,

and (iii) an instance to be operated upon if more than one instance of the particular data type

exists for the particular identity.

Van Huben et al. teaches (a), see column 6, lines 35 through column 7, line 12 and see

column 18, line 16 through column 19, line 6, where it is obvious that the authorization table

would control different identities (employees with different employee ID's) that have different

access rights to the data types; and (b), see figure 6, reference numbers 61, 63, 64, and 65, where

"an instance to be operated upon if more than one instance of the particular data type exists for

the particular identity" is taught because Van Huben et al. does not teach having more than one

instance. Therefore, it would have been obvious to a person having ordinary skill in the art at the

time the invention was made to have modified <u>Ellis et al.</u> by the teachings of <u>Van Huben et al.</u>

because these teachings would allow access to heterogeneous data repositories without

specialized commands for the different repositories (see <u>Van Huben et al.</u>, abstract).

As to claims 2 and 40, <u>Ellis et al.</u> as modified, teaches wherein the act of finding the

portion of the data structure that is to be operated upon comprises:

an act of accessing an identification of a location of the portion of the data structure (see

<u>Ellis et al.</u>, column 6, line 66 through column 7, line 1);

an act of navigating to the location of the portion of the data structure using the

identification of the location of the portion of the data structure (see <u>Ellis et al.</u>, column 6, line 66

through column 7, line 12);

an act of accessing an identification of a data type contained in the portion of the data

structure (see <u>Ellis et al.</u>, column 7, lines 1-6); and

an act of determining the portion of the data structure that is to be operated upon using

the identification of the location of the portion of the data structure, as well as the identification

of the data contained in the portion of the data structure (see <u>Ellis et al.</u>, column 7, lines 7-18).

As to claim 3, <u>Ellis et al.</u> as modified, teaches wherein a plurality of portions of the data

structure may be identified using the identification of the location of the portion of the data

structure, as well as the identification of the data type contained in the portion of the data

structure (see <u>Ellis et al.</u>, column 6, line 66 through column 7, line 6), the act of determining the

portion of the data structure further comprising:

an act of accessing a unique identifier associated with the portion of the data structure

that is to be operated upon, the unique identifier uniquely distinguishing the portion of the data

structure that is to be operated upon from amongst the plurality of portions of the data structure

that have the same location and data type (see Ellis et al., column 5, lines 1-19).

As to claims 4 and 41, Ellis et al. as modified, teaches wherein the computer-executable

instructions for determining that the command method is allowed to be implemented on the

portion of the data structure by consulting the set of rules comprises:

computer-executable instructions for determining that the portion of the data structure is

compatible with performing the command method (see Ellis et al., column 6, lines 13-25, where

if the data bags are not the same type the command method cannot be implemented).

As to claims 5 and 42 Ellis et al. teaches further comprising: an act of determining that a

request that issued the command method is authorized to execute the command method on the

portion of the data structure that is to be operated upon (see Van Huben et al., column 18, lines

53-67).

As to claim 12, Ellis et al. as modified, teaches wherein the act of accessing a request to

implement a command method on at least a portion of a data structure of a particular data type

comprises the following:

an act of accessing a request to insert the at least the portion of the data structure into the

data structure (see Ellis et al., column 6, lines 13-25).

As to claim 13, <u>Ellis et al.</u> as modified, teaches wherein the act of accessing a request to implement a command method on at least a portion of a data structure of a particular data type comprises the following:

an act of accessing a request to insert information into the portion of the data structure (see <u>Ellis et al.</u>, column 6, lines 13-25).

As to claim 14, <u>Ellis et al.</u> as modified, teaches wherein the act of accessing a request to implement a command method on at least a portion of a data structure of a particular data type comprises the following:

an act of accessing a request to delete the portion of the data structure (see <u>Ellis et al.</u>, column 6, lines 23-25, where "delete" is read on "overwritten").

As to claim 15, <u>Ellis et al.</u> as modified, teaches wherein the act of accessing a request to implement a command method on at least a portion of a data structure of a particular data type comprises the following:

an act of accessing a request to replace the portion of the data structure with a new portion of a data structure (see <u>Ellis et al.</u>, column 6, lines 23-25).

As to claim 16, <u>Ellis et al.</u> as modified, teaches wherein the act of accessing a request to implement a command method on at least a portion of a data structure of a particular data type

comprises the following: an act of accessing a query regarding the portion of the data structure

(see Ellis et al., column 6, lines 3-7).

As to claim 36, Ellis et al. teaches in a computer system that manages two or more

different types of data structures, each type of data structure being organized in accordance with

a set of rules and corresponding to an identity, a method for directly operating on data structures

in a generic manner regardless of the type of data structure being operated upon and without

requiring dedicated executable code for manipulating data structures of the particular data type,

the method comprising the following:

an act of recognizing a common set of command methods that operate on data structures

of a number of different data types corresponding to a plurality of identities (see column 6, lines

1-37);

an act of accessing a request to execute a command method on at least a portion of a data

structure of a particular data type corresponding to one or more applications and to a particular

identity, the command method being one of the common set of command methods (see column

7, lines 19-22); and

a step for executing the command method on at least a portion of the data structure in

accordance with a set of rules associated with the particular data type (see column 7, lines 13-

22).

Ellis et al. does not teach

(a) a number of different data types corresponding to a plurality of applications and to a

plurality of identities that control access to the data structures; and

(b) the request to execute the command method identifying the data structure by identifying (i) the particular identity, (ii) a set of rules associated with the particular data type, and (iii) an instance to be operated upon if more than one instance of the particular data type exists for the particular identity.

Van Huben et al. teaches (a), see column 6, lines 35 through column 7, line 12 and see column 18, line 16 through column 19, line 6, where it is obvious that the authorization table would control different identities (employees with different employee ID's) that have different access rights to the data types; and (b), see figure 6, reference numbers 61, 63, 64, and 65, where "an instance to be operated upon if more than one instance of the particular data type exists for the particular identity" is taught because Van Huben et al. does not teach having more than one instance. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Ellis et al. by the teachings of Van Huben et al. because these teachings would allow access to heterogeneous data repositories without specialized commands for the different repositories (see Van Huben et al., abstract).

As to claim 37, Ellis et al. as modified, teaches wherein the step for executing the command method on at least a portion of the data structure comprises:

an act of accessing a set of rules associated with the particular data type, the set of rules defining how data structures of the particular data type may be organized, and what portions of data structure of the particular data type may have what commands executed thereon (see Ellis et al., column 4, line 66 through column 5, line 27);

an act of finding the portion of the data structure that is to be operated upon by interpreting the request in light of the set of rules (see Ellis et al., column 6, line 66 through column 7, line 12);

an act of determining that the command method may be implemented on the portion of the data structure by consulting the set of rules (see Ellis et al., column 6, lines 13-25, where if the data bags are not the same type the command method cannot be implemented); and

an act of executing the command method on the found portion of the data structure (see Ellis et al., column 7, lines 13-22).

As to claim 38, Ellis et al. teaches a computer program product for use in a computer system that manages two or more different types of data structures, each type of data structure being organized in accordance with a set of rules, the computer program product for executing a method for directly operating on data structures in a generic manner regardless of the type of data structure being operated upon and without requiring dedicated executable code for manipulating data structures of the particular data type, the computer program product comprises one of more physical storage media having stored thereon:

computer-executable instructions for recognizing a common set of command methods that may be used to operate on data structures of a number of different data types corresponding to a plurality of identities (see column 6, lines 1-37);

computer-executable instructions for accessing a request to execute a command method on at least a portion of a data structure of a particular data type corresponding to one or more

applications and to a particular identity, the command method being one of the common set of

command methods (see column 7, lines 19-22);

computer-executable instructions for accessing the set of rules associated with the

particular data type, the set of rules defining how data structures of the particular data type are

organized, and what portions of data structure of the particular data type are allowed to have

what commands executed thereon (see column 4, line 66 through column 5, line 27);

computer-executable instructions for finding the portion of the data structure that is to be

operated upon by interpreting the request in light of the set of rules (see column 6, line 66

through column 7, line 12);

computer-executable instructions for determining that the command method is allowed to

be implemented on the portion of the data structure by consulting the set of rules (see column 6,

lines 13-25, where if the data bags are not the same type the command method cannot be

implemented); and

computer-executable instructions for executing the command method on the found

portion of the data structure (see column 7, lines 13-22).

Ellis et al. does not teach

(a) a number of different data types corresponding to a plurality of applications and to a

plurality of identities that control access to the data structures; and

(b) the request to execute the command method identifying the data structure by

identifying (i) the particular identity, (ii) a set of rules associated with the particular data type,

and (iii) an instance to be operated upon if more than one instance of the particular data type

exists for the particular identity.

Van Huben et al. teaches (a), see column 6, lines 35 through column 7, line 12 and see

column 18, line 16 through column 19, line 6, where it is obvious that the authorization table

would control different identities (employees with different employee ID's) that have different

access rights to the data types; and (b), see figure 6, reference numbers 61, 63, 64, and 65, where

"an instance to be operated upon if more than one instance of the particular data type exists for

the particular identity" is taught because Van Huben et al. does not teach having more than one

instance. Therefore, it would have been obvious to a person having ordinary skill in the art at the

time the invention was made to have modified Ellis et al. by the teachings of Van Huben et al.

because these teachings would allow access to heterogeneous data repositories without

specialized commands for the different repositories (see Van Huben et al., abstract).

As to claim 39, Ellis et al. as modified, teaches wherein the one or more computer

readable media are physical storage media (see Ellis et al., figure 1, reference numbers 17 and

24).

As to claim 43, Ellis et al. teaches a system for directly operating on data structures in a

generic manner regardless of the type of data structure being operated upon and without

requiring dedicated executable code for manipulating data structures of the particular data type,

the system comprising:

a data structure of a particular data type corresponding the data structure organized in

accordance with a set of rules and associated with an identity (see column 5, lines 1-19);

a navigation module configured to recognize a common set of command methods that

may be used to operate on data structures of a number of different data types corresponding to a

plurality of identities, including the data structure of the particular data type, the navigation

module is communicatively coupled to the data structure in order to navigate through the data

structure using the set of rules and performing any of the common set of command methods on

the data structure (see column 4, lines 59-65); and

a navigation assistance module communicatively coupled to the navigation module, the

navigation assistance module containing the set of rules that describe the organization of the data

structure (see column 5, lines 6-16).

Ellis et al. does not teach

(a) a particular data type corresponding to one or more applications, different data types

corresponding to a plurality of applications and to a plurality of identities that control access to

the data structures; and

(b) identifying the data structure by identifying (i) the identity, (ii) the set of rules

associated with the identity, and (iii) an instance to be operated upon if more than one instance of

the particular data type exists for the identity.

Van Huben et al. teaches (a), see column 6, lines 35 through column 7, line 12 and see

column 18, line 16 through column 19, line 6, where it is obvious that the authorization table

would control different identities (employees with different employee ID's) that have different

access rights to the data types; and (b), see figure 6, reference numbers 61, 63, 64, and 65, where

"an instance to be operated upon if more than one instance of the particular data type exists for

the particular identity" is taught because Van Huben et al. does not teach having more than one

instance. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Ellis et al. by the teachings of Van Huben et al. because these teachings would allow access to heterogeneous data repositories without specialized commands for the different repositories (see Van Huben et al., abstract).

As to claim 44, Ellis et al. as modified, teaches wherein the data structure is a first data structure, the particular data type is a first data type, and the set of rules is a first set of rules, wherein the system further comprises:

a second data structure of a second data type, the second data structure being organized in accordance with a second set of rules, wherein the navigation assistance module also contains the second set of rules, wherein the navigation module is capable of navigation through the second data structure using the second set of rules and performing any of the common set of command methods on the second data structure (see Ellis et al., column 5, lines 1-19).

As to claim 46, Ellis et al. teaches in a computer system that manages two or more different types of data structures, each type of data structure being organized in accordance with a set of rules and corresponding to an identity, a method for directly operating on data structures in a generic manner regardless of the type of data structure being operated upon and without requiring dedicated executable code for manipulating data structures of the particular data type, the method comprising:

an act of accessing a request to execute a command method on at least a portion of a data

structure of a particular data type corresponding to a particular identity (see column 7, lines 19-

22);

an act of accessing the set of rules associated with the particular data type, the set of rules

defining how data structures of the particular data. type are organized (see column 4, line 66

through column 5, line 27); and

an act of executing the command method on a portion of the data structure determined by

interpreting the request in light of the set of rules (see column 7, lines 13-22).

Ellis et al. does not teach

(a) a particular data type corresponding to one or more of a plurality of applications and

to a particular identity that controls access to the data structure; and

(b) the request identifying the data structure by identifying (i) the particular identity, (ii) a

set of rules associated with the particular data type, and (iii) an instance to be operated upon if

more than one instance of the particular data type exists for the particular identity.

Van Huben et al. teaches (a), see column 6, lines 35 through column 7, line 12 and see

column 18, line 16 through column 19, line 6, where it is obvious that the authorization table

would control different identities (employees with different employee ID's) that have different

access rights to the data types; and (b), see figure 6, reference numbers 61, 63, 64, and 65, where

"an instance to be operated upon if more than one instance of the particular data type exists for

the particular identity" is taught because Van Huben et al. does not teach having more than one

instance. Therefore, it would have been obvious to a person having ordinary skill in the art at the

time the invention was made to have modified Ellis et al. by the teachings of Van Huben et al.

because these teachings would allow access to heterogeneous data repositories without

specialized commands for the different repositories (see <u>Van Huben et al.</u>, abstract).

As to claim 47, <u>Ellis et al.</u> as modified, teaches wherein the act of executing the

command method on a portion of the data structure determined by interpreting the request in

light of the set of rules comprises:

an act of accessing an identification of a location of the portion of the data structure (see

<u>Ellis et al.</u>, column 6, line 66 through column 7, line 1);

an act of navigating to the location of the portion of the data structure using the

identification of the location of the portion of the data structure (see <u>Ellis et al.</u>, column 6, line 66

through column 7, line 12);

an act of accessing an identification of a data type contained in the portion of the data

structure (see <u>Ellis et al.</u>, column 7, lines 1-6); and

an act of determining the portion of the data structure that is to be operated upon using

the identification of the location of the portion of the data structure, as well as the identification

of the data contained in the portion of the data structure (see <u>Ellis et al.</u>, column 7, lines 7-18).

6.   Claims 6-11 and 48-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over

<u>Ellis et al.</u> (U.S. patent No. 6,195,662 B1) in view of <u>Van Huben et al.</u> (U.S. patent No.

6,654,747 B1) as applied to claims 1-5, 12-16, 36-44, and 46-47 above, and in further view of

<u>Inohara et al.</u> (U.S. patent No. 6,377,952 B1).

As to claim 6, <u>Ellis et al.</u> as modified, still does not teach wherein the act of accessing a request to implement a command method on at least a portion of a data structure of a particular data type comprises the following:

an act of accessing a request to query the portion of the data structure to determine if the portion of a data structure is synchronized with a copy of the portion of the data structure.

<u>Inohara et al.</u> teaches a system for file conversion into different formants so that they can be opened my many different applications (see abstract), in which he teaches wherein the act of accessing a request to implement a command method on at least a portion of a data structure of a particular data type comprises the following: an act of accessing a request to query the portion of the data structure to determine if the portion of a data structure is synchronized with a copy of the portion of the data structure (see column 10, lines 14-20).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified <u>Ellis et al.</u> by the teachings of <u>Inohara et al.</u> because wherein the act of accessing a request to implement a command method on at least a portion of a data structure of a particular data type comprises the following: an act of accessing a request to query the portion of the data structure to determine if the portion of a data structure is synchronized with a copy of the portion of the data structure would make sure the file reflects the latest updates (see <u>Inohara et al.</u>, column 10, lines 14-20).

As to claim 7, <u>Ellis et al.</u> as modified, teaches wherein the act of executing the command method on the found portion of the data structure comprises:

an act of comparing a version identifier of the portion of the data structure with a version

identifier of the copy of the portion of the data structure (see <u>Inohara et al.</u>, column 10, lines 14-

20).

As to claim 8, <u>Ellis et al.</u> as modified, teaches wherein the act of executing the command

method on the found portion of the data structure further comprises:

an act of determining that the version identifier of the portion of the data structure is the

same as the version identifier of the copy of the portion of the data structure (see <u>Inohara et al.</u>,

column 10, lines 56-64).

As to claim 9, <u>Ellis et al.</u> as modified, teaches wherein the act of executing the command

method on the found portion of the data structure further comprises:

an act of reporting that the portion of the data structure is synchronized with the copy of

the portion of the data structure (see <u>Inohara et al.</u>, column 10, lines 56-64).

As to claim 10, <u>Ellis et al.</u> as modified, teaches wherein the act of executing the

command method on the found portion of the data structure further comprises:

an act of determining that the version identifier of the portion of the data structure is

different than the version identifier of the copy of the portion of the data structure (see <u>Inohara et</u>

<u>al.</u>, column 10, lines 21-55).

As to claim 11, Ellis et al. as modified, teaches wherein the act of executing the command method on the found portion of the data structure further comprises:

an act of responding to the request with a response that includes instructions that are configured to bring the copy of the portion of the data structure in synchronization with the portion of the data structure (see Inohara et al., column 10, lines 21-55).

As to claim 48, Ellis et al. as modified, still does not teach wherein the act of accessing a request to execute a command method on at least a portion of a data structure of a particular data type comprises the following: an act of accessing a request to query the portion of the data structure to determine if the portion of a data structure is synchronized with a copy of the portion of the data structure.

Inohara et al. teaches wherein the act of accessing a request to execute a command method on at least a portion of a data structure of a particular data type comprises the following: an act of accessing a request to query the portion of the data structure to determine if the portion of a data structure is synchronized with a copy of the portion of the data structure (see column 10, lines 14-20).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Ellis et al. by the teachings of Inohara et al. because wherein the act of accessing a request to execute a command method on at least a portion of a data structure of a particular data type comprises the following: an act of accessing a request to query the portion of the data structure to determine if the portion of a data structure is

synchronized with a copy of the portion of the data structure would make sure the file reflects the

latest updates (see <u>Inohara et al.</u>, column 10, lines 14-20).

As to claim 49, <u>Ellis et al.</u> as modified, teaches wherein the act of executing the

command method on a portion of the data structure comprises:

an act of comparing a version identifier of the portion of the data structure with a version

identifier of the copy of the portion of the data structure (see <u>Inohara et al.</u>, column 10, lines 14-

20).

7.   Claims 17-35, and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over

<u>Ellis et al.</u> (U.S. patent No. 6,195,662 B1) in view of <u>Van Huben et al.</u> (U.S. patent No.

6,654,747 B1) as applied to claims 1-5, 12-16, 36-44, and 46-47 above, and in further view of

<u>Lal</u> (U.S. patent No. 6,684,204 B1).

As to claim 17, <u>Ellis et al.</u> as modified, still does not teach wherein the set of rules

associated with the particular data type comprises a schema that defines a class of extensible

Markup Language documents.

<u>Lal</u> teaches a method of searching on a network with various XML documents of

different types using the tags from the documents to produce a more precise search (see abstract),

in which he teaches wherein the set of rules associated with the particular data type comprises a

schema that defines a class of extensible Markup Language documents (see column 4, lines 13-

45).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified <u>Ellis et al.</u> by the teachings of <u>Lal</u> because wherein the set of rules associated with the particular data type comprises a schema that defines a class of extensible Markup Language documents would allow the searcher to choose what fields should be searched by selecting the appropriate tags (see <u>Lal</u>, column 6, lines 1-13).

As to claim 18, <u>Ellis et al.</u> as modified, teaches wherein the class comprises a class of XML documents that define calendar information (see <u>Lal</u>, column 4, lines 13-21, where it would be obvious to one skilled in the art to make an XML document with calendar information).

As to claim 19, <u>Ellis et al.</u> as modified, teaches wherein the class comprises a class of XML documents that define in-box information (see <u>Lal</u>, column 4, lines 13-21, where it would be obvious to one skilled in the art to make an XML document with in-box information).

As to claim 20, <u>Ellis et al.</u> as modified, teaches wherein the class comprises a class of XML documents that define document information (see <u>Lal</u>, column 4, lines 13-21).

As to claim 21, <u>Ellis et al.</u> as modified, teaches wherein the class comprises a class of XML documents that define presence information (see <u>Lal</u>, column 4, lines 13-21, where it would be obvious to one skilled in the art to make an XML document with presence information).

As to claim 22, Ellis et al. as modified, teaches wherein the class comprises a class of

XML documents that define personal address information (see Lal, column 4, lines 13-21, where

it would be obvious to one skilled in the art to make an XML document with personal address

information).

As to claim 23, Ellis et al. as modified, teaches wherein the class comprises a class of

XML documents that define contacts information (see Lal, column 4, lines 13-21, where it would

be obvious to one skilled in the art to make an XML document with contacts information).

As to claim 24, Ellis et al. as modified, teaches wherein the class comprises a class of

XML documents that define application setting information (see Lal, column 4, lines 13-21,

where it would be obvious to one skilled in the art to make an XML document with application

setting information).

As to claim 25, Ellis et al. as modified, teaches wherein the class comprises a class of

XML documents that define physical device information (see Lal, column 4, lines 13-21, where

it would be obvious to one skilled in the art to make an XML document with physical device

information).

As to claim 26, Ellis et al. as modified, teaches wherein the class comprises a class of

XML documents that define favorite Web site information (see Lal, column 4, lines 13-21,

where it would be obvious to one skilled in the art to make an XML document with favorite Web site information).

As to claim 27, Ellis et al. as modified, teaches wherein the class comprises a class of XML documents that define payment information (see Lal, column 4, lines 13-21, where it would be obvious to one skilled in the art to make an XML document with payment information).

As to claim 28, Ellis et al. as modified, teaches wherein the class comprises a class of XML document that define notification information (see Lal, column 4, lines 13-21, where it would be obvious to one skilled in the art to make an XML document with notification information).

As to claim 29, Ellis et al. as modified, still does not teach wherein the act of determining that the command method may be implemented on the portion of the data structure by consulting the set of rules comprises the following:

an act of determining that the portion of the data structure is a root element of the data structure.

Lal teaches wherein the act of determining that the command method may be implemented on the portion of the data structure by consulting the set of rules comprises the following: an act of determining that the portion of the data structure is a root element of the data structure (see column 4, lines 39-46).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Ellis et al. by the teachings of Lal because wherein the act of determining that the command method may be implemented on the portion of the data structure by consulting the set of rules comprises the following: an act of determining that the portion of the data structure is a root element of the data structure would allow the searcher to specify the right tag when tag names are used more than once in a structure (see Lal, column 4, lines 13-21).

As to claim 30, Ellis et al. as modified, still does not teach wherein the act of determining that the command method may be implemented on the portion of the data structure by consulting the set of rules comprises the following:

an act of determining that the portion of the data structure is second-level nested element of the data structure.

Lal teaches wherein the act of determining that the command method may be implemented on the portion of the data structure by consulting the set of rules comprises the following: an act of determining that the portion of the data structure is second-level nested element of the data structure (see column 4, lines 39-46).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Ellis et al. by the teachings of Lal because wherein the act of determining that the command method may be implemented on the portion of the data structure by consulting the set of rules comprises the following: an act of determining that the portion of the data structure is second-level nested element of the data structure would allow the

searcher to specify the right tag when tag names are used more than once in a structure (see Lal, column 4, lines 39-46).

As to claim 31, Ellis et al. as modified, still does not teach wherein the act of determining that the command method may be implemented on the portion of the data structure by consulting the set of rules comprises the following:

an act of determining that the portion of the data structure is a selectable attribute associated with a second-level nested element of the data structure, wherein only some of the attributes associated with the portion of the data structure are selectable.

Lal teaches wherein the act of determining that the command method may be implemented on the portion of the data structure by consulting the set of rules comprises the following: an act of determining that the portion of the data structure is a selectable attribute associated with a second-level nested element of the data structure, wherein only some of the attributes associated with the portion of the data structure are selectable (see column 4, lines 39-46).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Ellis et al. by the teachings of Lal because wherein the act of determining that the command method may be implemented on the portion of the data structure by consulting the set of rules comprises the following: an act of determining that the portion of the data structure is a selectable attribute associated with a second-level nested element of the data structure, wherein only some of the attributes associated with the portion of

the data structure are selectable would allow the searcher to specify the right tag when tag names

are used more than once in a structure (see <u>Lal</u>, column 4, lines 39-46).

As to claim 32, <u>Ellis et al.</u> as modified, still does not teach wherein the particular identity

is an individual.

<u>Lal</u> teaches wherein the particular identity is an individual (see column 4, lines 13-29).

It would have been obvious to a person having ordinary skill in the art at the time the

invention was made to have modified <u>Ellis et al.</u> by the teachings of <u>Lal</u> because wherein the

particular identity is an individual would set up standard formats for documents (see <u>Lal</u>, column

4, lines 13-29).

As to claim 33, <u>Ellis et al.</u> as modified, still does not teach wherein the particular identity

is a group of individuals.

<u>Lal</u> teaches wherein the particular identity is a group of individuals (see column 4, lines

13-29).

It would have been obvious to a person having ordinary skill in the art at the time the

invention was made to have modified <u>Ellis et al.</u> by the teachings of <u>Lal</u> because wherein the

particular identity is a group of individuals would set up standard formats for documents (see

<u>Lal</u>, column 4, lines 13-29).

As to claim 34, <u>Ellis et al.</u> as modified, still does not teach wherein the particular identity

is an organization.

Lal teaches wherein the particular identity is an organization (see column 4, lines 13-29).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Ellis et al. by the teachings of Lal because wherein the particular identity is an organization would set up standard formats for documents (see Lal, column 4, lines 13-29).

As to claim 35, Ellis et al. as modified, still does not teach wherein the data structure comprises a hierarchical data structure.

Lal teaches wherein the data structure comprises a hierarchical data structure (see column 4, lines 39-46).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Ellis et al. by the teachings of Lal because wherein the data structure comprises a hierarchical data structure would allow the searcher to specify the right tag when tag names are used more than once in a structure (see Lal, column 4, lines 39-46).

As to claim 50, Ellis et al. as modified, still does not teach wherein the set of rules associated with the particular data type comprises a schema that defines a class of extensible Markup Language documents.

Lal teaches wherein the set of rules associated with the particular data type comprises a schema that defines a class of extensible Markup Language documents (see column 4, lines 13-45).

It would have been obvious to a person having ordinary skill in the art at the time the

invention was made to have modified Ellis et al. by the teachings of Lal because to include

wherein the set of rules associated with the particular data type comprises a schema that defines a

class of extensible Markup Language documents would allow the searcher to choose what fields

should be searched by selecting the appropriate tags (see Lal, column 6, lines 1-13).

Response to Arguments

8.   Applicant's arguments with respect to claim 1-50 have been considered but are moot in

view of the new ground(s) of rejection.

Conclusion

9.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

10.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jacob F. Betit whose telephone number is (571) 272-4075. The

examiner can normally be reached on Monday through Friday 9 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Charles Rones can be reached on (571) 272-4085. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

jfb
19 Sep 2005

SAM RIMELL
PRIMARY EXAMINER